CLAIMS

What is claimed is:

1   1.   A non-stalled requesting system comprising:

2   a first storage device for storing a plurality of texels;

3   a second storage device coupled to the first storage device for storing a first texel of the

4   plurality of texels;

5   a third storage device for storing an association between a first identifier signal and the

6   first texel;

7   a first logic device coupled to the second storage device and the third storage device for

8   responding to a second identifier signal matching the first identifier signal by triggering the

9   transmission of the first texel from the second storage device and for responding to the second

10   signal not matching the first identifier signal by retrieving a second texel of the plurality of texels

11   from the first storage device; the second texel having an association with the second identifier

12   signal.

1   2.   The system of claim 1 further comprising:

2   a second logic device coupled to the first logic device for synchronizing the transmission

3   of the first texel from the second storage device.

1   3.   The system of claim 1 further comprising:

2   a third logic device coupled to the first logic device for synchronizing the storing of the

3   second texel in the second storage device.

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1 4. The system of claim 2 further comprising:

2 a fourth storage device coupled to second logic device for storing an association between

3 the second storage device and a plurality of logic states.

1 5. The system of claim 1 further comprising:

2 a first counter coupled to the first logic device for responding to the second identifier

3 signal matching the first identifier signal by changing a first value to a second value.

1 6. The system of claim 2 further comprising:

2 a second counter coupled to the second logic device for responding to the transmission of

3 the first texel by the second storage device by changing a third value to a fourth value.

1 7. The system of claim 5 further comprising:

2 a second counter for responding to the transmission of the first texel by the second

3 storage device by changing a third value to a fourth value; and

4 a third logic device coupled to the first logic device and to the second counter for

5 responding to the fourth value having a value at least as large as the second value by triggering

6 the storing of the second texel in the second storage device.

1 8. The system of claim 1 further comprising:

2 a second logic device coupled to the second storage device for controlling the

3 transmission of the first texel from the second storage device;

4 a third logic device coupled to the second storage device for triggering the storing of the

5 second texel in the second storage device; and

6   a third storage device coupled to the second logic device and the third logic device for

7 synchronizing the transmission of the first texel and the storing of the second texel.

1 9.   The system of claim 3 further comprising:

2   a first buffer coupled to the first storage device, the second storage device and the third

3 logic device for delaying the storing of the second texel in the second storage module until the

4 third logic device triggers the storing of the second texel in the second storage device.

1 10.   The system of claim 9 wherein the first buffer is a first in, first out queue.

1 11.   A method for requesting texels, the method comprising the steps of:

2   storing the plurality of texels in a first storage device;

3   storing a first texel of the plurality of texels in a second storage device;

4   storing an association between a first identifier signal and the first texel;

5   responding to a second identifier signal matching the first identifier signal by triggering

6 the transmission of the first texel from the second storage device; and

7   responding to the second identifier signal not matching the first identifier signal by

8 retrieving a second texel of the plurality of texels, having an association with the second

9 identifier signal, from the first storage device.

1 12.   The method of claim 1 comprising the additional step of:

2   synchronizing the transmission of the first texel from the second storage device.

1 13.   The method of claim 1 comprising the additional step of:

2   synchronizing the storing of the second texel in the second storage device.

1 14.   The method of claim 12 comprising the additional step of:

2   storing an association between the second storage device and a plurality of logic states.

1 15.   The method of claim 11 comprising the additional step of:

2   responding to the second identifier signal matching the first identifier signal by changing

3 a first value to a second value.

1 16.   The method of claim 12 comprising the additional step of:

2   responding to the transmission of the first texel by the second storage device by changing

3 a third value to a fourth value.

1 17.   The method of claim 15 comprising the additional step of:

2   responding to the transmission of the first texel by the second storage device by changing

3 a third value to a fourth value; and

4   responding to the fourth value having a value at least as large as the second value by

5 triggering the storing of the second texel in the second storage device.

1 18.   The method of claim 11 comprising the additional step of:

2   controlling the transmission of the first texel from the second storage device;

3   triggering the storing of the second texel in the second storage device; and

4   synchronizing the transmission of the first texel and the storing of the second texel.

1 19.   The method of claim 13 comprising the additional step of:

2   delaying the storing of the second texel in the second storage module until the third logic

3 device triggers the storing of the second texel in the second storage device.

1   20.   The method of claim 19 wherein the delay the storing of the second texel comprises the

2   additional step of:

3   transmitting the second texel, which was received prior to a third texel, before

4   transmitting the third texel.

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